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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,006	07/24/2003	Mark B. Lyles	068351.0141	9914

31625 7590 11/21/2005

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AUSTIN, TX 78701-4039

EXAMINER

MAYES, DIONNE WALLS

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 11/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/626,006	LYLES, MARK B.	
	Examiner	Art Unit	
	Dionne Walls Mayes	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 10-14 and 58-107 is/are pending in the application.
 4a) Of the above claim(s) 66-107 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10-14 and 58-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Re-Opening of Prosecution/Withdrawal of Previously Indicated Allowable Subject Matter

After updating a search of the prior art, the Examiner has determined that a new ground of rejection should be made over the claims as filed on November 1, 2005, in view of the discovery of the Strauch (US. Pat. No. 2,097,846) and Rubinfeld et al (US. Pat. No. 6,613,753) references. Therefore, the FINALITY of the rejection of the last Office Action, dated September 1, 2005, and the indication of allowable subject matter has been WITHDRAWN. In view of the discovery of the above-cited art, PROSECUTION IS HEREBY REOPENED as set forth below.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 10-14, 58-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strauch (US. Pat. No. 2,097,846) in view of Rubinfeld et al (US. Pat. No. 6,613,753).

Strauch discloses a filter disposed within a cigarette holder, see Figs. 6 and 7, said filter having a filtering surface (34). While Strauch may not specifically state that the filter includes a carcinogen-reducing amount of crosslinked nucleic acid which is apurinic acid, Strauch does state that its disclosed filter may be medicated with volatile

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drugs (also see page 2, col. 1, lines 65-74). Further, Rubinfeld et al discloses a drug that acts as an anti-neoplastic or anti-cancer agent, such as apurinic acid, which can be administered via inhalation (see entire document). It follows that one having ordinary skill in the art would have opted to add the apurinic acid-based drug, disclosed in Rubinfeld et al, into the filter of Strauch in order to receive the therapeutic benefits of the drug in combating some of the well-known cancerous effects that tobacco smoke has on the body over time. While there may be no teaching in the combined references of a "carcinogen-reducing" amount of apurinic acid added to such filter, it follows, from the teaching, in Rubinfeld, of the addition of a "therapeutically effective" amount of the substance, that one would have obviously added the drug in an amount so as to cause a reduction of carcinogens in tobacco smoke.

Regarding claims 3 and 12, It would have been obvious to one having ordinary skill in the art at the time of the invention to have distributed the nucleic acid substantially uniformly on the filtering surface, of any of the filters disclosed in the above references, in order to better appreciate the benefits of the substance in filtering harmful material from fluids.

Regarding claims 5 and 14, one having ordinary skill in the art would have optimized the amount of apurinic acid, and arrived at the claimed percentage in an effort to achieve the most effective amount of drug delivery to the user.

Regarding claims 58-59, it follows that the claimed bonds, especially covalent bonding, would occur due to the cross linking since these types of bonds commonly occur in chemical and/or physical modification of chemical substances.

Response to Arguments

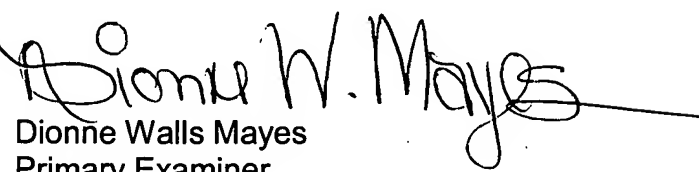
3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Walls Mayes whose telephone number is (571) 272-1195. The examiner can normally be reached on Mon-Fri, 7AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Dionne Walls Mayes
Primary Examiner
Art Unit 1731

November 16, 2005